

Notice of Allowability

Application No.

10/805,634

Examiner

Kimberly E. Glenn

Applicant(s)

GURVICH ET AL.

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/17/05.
2. ☒ The allowed claim(s) is/are 1-15 and 17-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: With regards to claims 1-3, the prior art does not disclose or fairly teach adjusting the first variable capacitance by applying the capacitive control signal to the first variable capacitance such that the capacitance of the group delay adjusting circuit adjusted; applying an inductive control signal second variable capacitance; and adjusting the second variable capacitance by applying the inductive control signal to the second variable capacitance of a virtual inductor such that the inductance of the group delay adjusting circuit adjusted. With regards to claims 4-6, the prior art does not disclose or fairly teach adjusting the first variable capacitance by applying conjunctional positive capacitive control signal to the first variable capacitance; applying an inductive control signal to a second variable capacitance; and adjusting the second variable capacitance by applying a conjunctional positive inductive control signal to the second variable capacitance. With regards to claims 7-12, the prior art does not disclose or fairly teach a group delay of a signal envelope coupled to the input of the transmission line is adjusted at the output of the transmission line, by coupling a first variable voltage to the first delay adjust signal input, coupling a second variable voltage to the second delay adjust signal input, and coupling a DC bias voltage to the DC bias input. With regards to claims 13-15, 17 and 18, the prior art of record does not disclose or fairly teach an electronically variable virtual inductor having its inductance adjusted by a second delay adjust signal, coupled in parallel to the electronically variable capacitance at a node; and a transmission line coupled to the electronically variable virtual inductor and the

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electronically adjustable variable capacitor at the node, whereby a signal envelope having a group delay applied to the node is adjusted by the capacitance and inductance such that the group delay is adjusted. With regards to claim 20, the prior art does not disclose or fairly teach adjusting a second variable shunt capacitance; and electrically rotating the second variable shunt capacitance to a variable inductance by coupling the variable shunt capacitance to a first terminal of a series transmission line having an electrical length of a quarter wavelength at a frequency of operation, in which a second terminal of the series transmission line is coupled to the first terminal of the first parallel variable shunt capacitance such that the second terminal of the series transmission line provides a variable inductance. With regards to claims 21-24, the prior art does not disclose or fairly teach setting a first control voltage to a first value; adjusting a second control voltage to produce a predetermined insertion loss flatness; measure a phase at a low frequency; measure the phase at a high frequency; calculate the group delay; and record the first control voltage, the second control voltage values and group delay.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

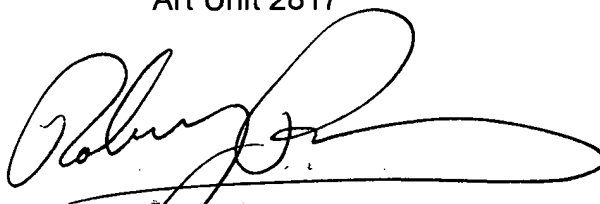
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly E Glenn
Examiner
Art Unit 2817

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Robert Pascal
Supervisory Patent Examiner
Technology Center 2800